Title (en)

OPTICAL FIBER COMMUNICATION WITH FREQUENCY-DIVISION-MULTIPLEXING

Publication

EP 0201825 A3 19880316 (EN)

Application

EP 86106096 A 19860503

Priority

US 73329085 A 19850510

Abstract (en)

[origin: EP0201825A2] A system is disclosed for providing multi-channel transmission of digital and broadband video information in optical fiber communication for local area networks through frequency-division-multiplexing. A plurality of closely spaced optical carrier wave pairs (90-100) is generated with the optical carrier waves within each optical carrier wave pair having a predetermined separation frequency between one another. Each of the plurality of optical carrier wave pairs is assigned to a predetermined frequency slot and optically combining the plurality of optical carrier wave pairs to provide a multiplexed optical output wave. Advantageously, in addition to direct detection the plurality of optical carrier wave pairs (90-100) may be detected by opto-electronic heterodyne detection and/or incoherent optical-heterodyne detection to electronically recover the optical carrier wave pairs.

IPC 1-7

H04J 1/00; H04B 9/00

IPC 8 full level

H04J 14/00 (2006.01); **H04B 10/00** (2006.01); **H04B 10/142** (2006.01); **H04B 10/145** (2006.01); **H04B 10/155** (2006.01); **H04B 10/20** (2006.01); **H04J 14/02** (2006.01)

CPC (source: EP US)

H04B 10/50 (2013.01 - EP US); **H04B 10/572** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AT CH DE FR GB LI

DOCDB simple family (publication)

EP 0201825 A2 19861120; **EP 0201825 A3 19880316**; AU 5677286 A 19861113; CN 86102602 A 19861105; ES 554818 A0 19870716; ES 8707051 A1 19870716; JP S61261935 A 19861120; US 4775972 A 19881004

DOCDB simple family (application)

EP 86106096 A 19860503; AU 5677286 A 19860428; CN 86102602 A 19860412; ES 554818 A 19860509; JP 10502286 A 19860509; US 73329085 A 19850510